



SEQUENCE LISTING

<110> Pompejus, Markus
Doval, Jose Luis Revuelta
Garcia, Maria Angeles Santos

<120> Orotidine-5'-phosphate decarboxylase gene, gene construct comprising
this gene and its use.

<140> US 09/582,779

<141> 2000-07-03

<150> Germany/19801120.2

<151> 1998-01-15

<160> 6

<170> WordPerfect version 6.1

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<212> DNA

<213> Ashbya gossypii

<220>

<221> CDS

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catacattct gatggtgtag gctccacatc acagtaagca tttgtataag gctgatcaca 180

tagggtgcta cgcacctagc cattgccac atg tca acg aaa tct tac gca gaa 233
Met Ser Thr Lys Ser Tyr Ala Glu
1 5

agg gcc aag gca cac aat tcg cca gtt gct aga aag ctt ctg gca ttg 281
Arg Ala Lys Ala His Asn Ser Pro Val Ala Arg Lys Leu Leu Ala Leu
10 15 20

atg cac gag aag aaa acc aat ctc tgc gct tcc ctt gat gtg cgg acg 329
Met His Glu Lys Lys Thr Asn Leu Cys Ala Ser Leu Asp Val Arg Thr
25 30 35 40

tct aga aag ctt ctg gag cta gca gac acg ctg gga ccg cac att tgt 377
Ser Arg Lys Leu Leu Glu Leu Ala Asp Thr Leu Gly Pro His Ile Cys
45 50 55

ctg ctg aag aca cat gtc gac ata ctg acg gac ttc gac atc gag acg 425

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C. [Signature]

265

ccgccgatta ccattcagc aacctttttg taattatatg cccctattgc ccttatttcc 1110
 gagctggtgc cgggatcggg ttatagacgg gcaacaagtt gatactttgt tcagtagcat 1170
 gcatccaaca cttgcaggct tgggggtgtg aaggcctcgc cgcggataat tcgtattacc 1230
 cgcacttcgt gaagtattgc tttatgaaaa atcttcactt tgggctaact agagccataa 1290
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<212> PRT

<213> Ashbya gossypii

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 Val Ala Arg Lys Leu Leu Ala Leu Met His Glu Lys Lys Thr Asn Leu
 20 25 30
 Cys Ala Ser Leu Asp Val Arg Thr Ser Arg Lys Leu Leu Glu Leu Ala
 35 40 45
 Asp Thr Leu Gly Pro His Ile Cys Leu Leu Lys Thr His Val Asp Ile
 50 55 60
 Leu Thr Asp Phe Asp Ile Glu Thr Thr Val Lys Pro Leu Gln Gln Leu
 65 70 75 80
 Ala Ala Lys His Asn Phe Met Ile Phe Glu Asp Arg Lys Phe Ala Asp
 85 90 95
 Ile Gly Asn Thr Val Lys Leu Gln Tyr Ser Ser Gly Val Tyr Arg Ile
 100 105 110
 Ala Glu Trp Ala Asp Ile Thr Asn Ala His Gly Val Thr Gly Pro Gly
 115 120 125
 Val Ile Ala Gly Leu Lys Glu Ala Ala Lys Leu Ala Ser Gln Glu Pro
 130 135 140
 Arg Gly Leu Leu Met Leu Ala Glu Leu Ser Ser Gln Gly Ser Leu Ala
 145 150 155 160
 Arg Gly Asp Tyr Thr Ala Gly Val Val Glu Met Ala Lys Leu Asp Glu

165

170

175

Asp Phe Val Ile Gly Phe Ile Ala Gln Arg Asp Met Gly Gly Arg Ala
 180 185 190

Asp Gly Phe Asp Trp Leu Ile Met Thr Pro Gly Val Gly Leu Asp Asp
 195 200 205

Lys Gly Asp Gly Leu Gly Gln Gln Tyr Arg Thr Val Asp Glu Val Val
 210 215 220

Ser Asp Gly Thr Asp Val Ile Ile Val Gly Arg Gly Leu Phe Asp Lys
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Glu Ala Tyr Leu Arg Arg Met Gly Glu Thr Ser
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C1
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C.1
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19--.